

FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	STPG-218-1(7)E	34	66

U.S. 40 EAST (EAST WASHINGTON STREET) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

SIGNALS

1,2,3
4,5,7
6
R
Y
G
12"
12"

→ → OPTICAL PRE-EMPTION
DETECTOR EYE

SIGNS

8
ONLY
R3-5L
30" x 36"

9
N. Cannon Ave
S. Cannon Ave
D3-2
Var. x 32"

10,12
ONE WAY
R6-1(R)
36" x 12"

11,14
E. Washington St
D3-2
Var. x 16"

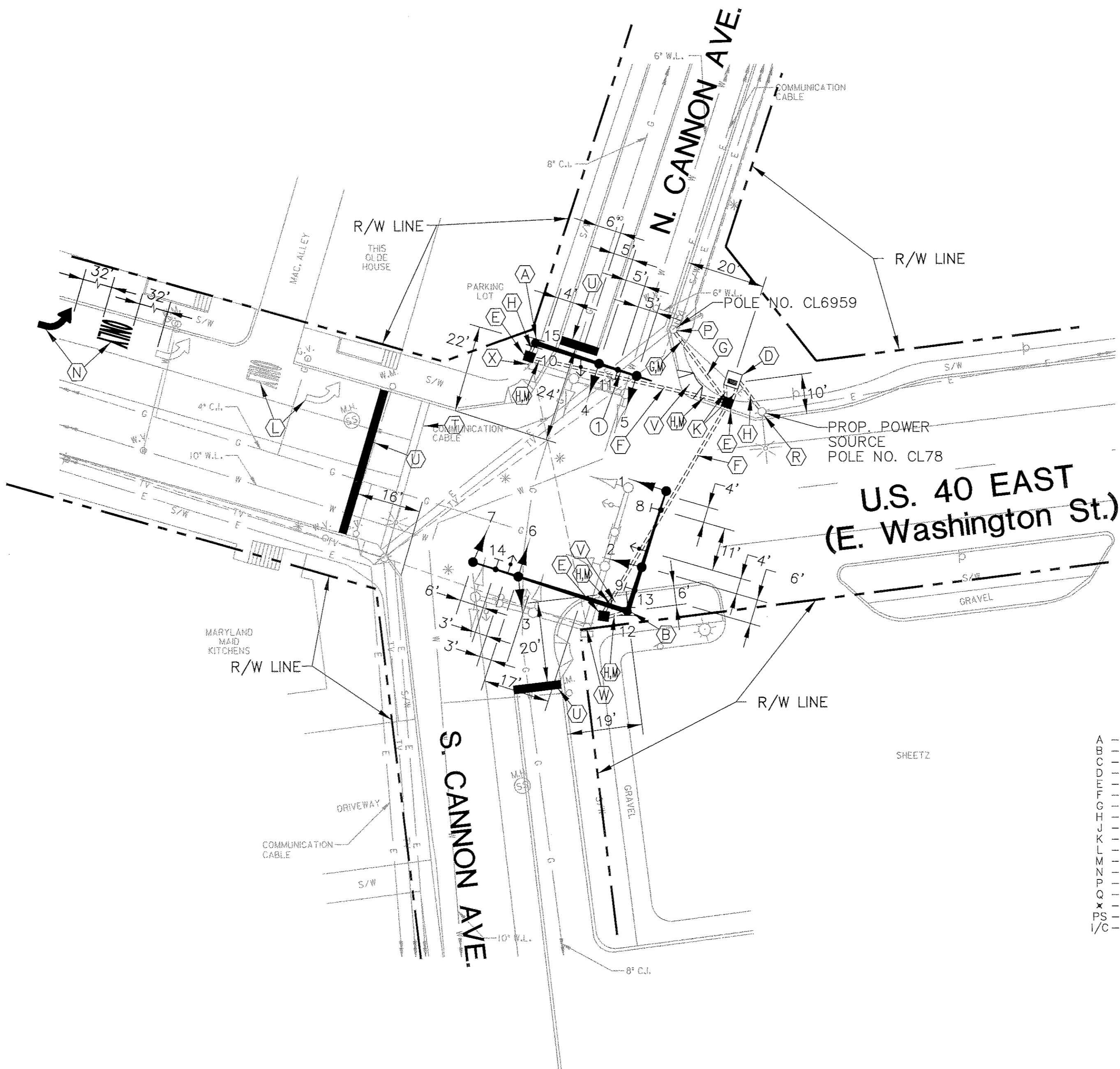
13,15
ONE WAY
R6-1(L)
36" x 12"

CONSTRUCTION DETAILS

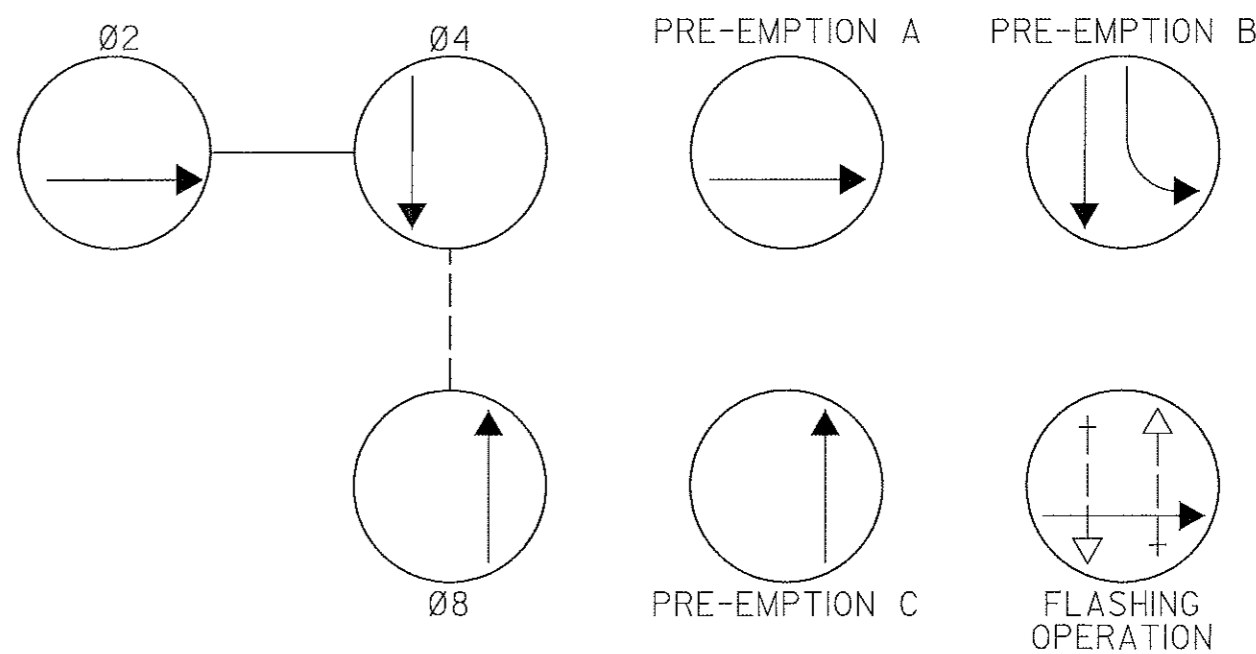
- (A) INSTALL 21' STEEL POLE, 32' MAST ARM, SIGNAL HEADS, SIGNS AND OPTICOM DETECTOR (NOTE: 1-2", 90-DEGREE P.V.C. BEND).
- (B) INSTALL 21' STEEL POLE, 42' AND 32' MAST ARMS, SIGNAL HEADS, SIGNS AND OPTICOM DETECTORS (NOTE: 1-2" 90-DEGREE P.V.C. BEND).
- (D) INSTALL BASE-MOUNTED CABINET, SIZE #5, AND CONTROLLER WITH ALL NECESSARY EQUIPMENT AS SHOWN (NOTE: 2-4", 90-DEGREE P.V.C. BENDS; AND, 2-2", 90-DEGREE P.V.C. BENDS.)
- (E) INSTALL HANDHOLE.
- (F) INSTALL 2" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT (SLOTTED).
- (G) INSTALL 3" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT (TRENCHED).
- (H) INSTALL 2" P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).
- (K) INSTALL 4" P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).
- (L) REMOVE EXISTING PAVEMENT MARKING.
- (M) REMOVE AND REPLACE EXISTING SIDEWALK.
- (N) INSTALL PAVEMENT MARKING.
- (P) INSTALL 3" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT - RISER AND 3" WEATHERHEAD.
- (R) INSTALL 10' OF 2" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT - RISER AND COIL 25' OF ADDITIONAL CABLE.
- (T) REMOVE EXISTING STOP BAR.
- (U) INSTALL 24" SOLID WHITE LINE.
- (V) CONSTRUCT SIDEWALK RAMP.
- (W) REMOVE EXISTING STEEL POLE, MAST ARMS, SIGNALS, SIGNS, CABINET, CONTROLLER, OPTICOM DETECTORS AND FOUNDATION.
- (X) REMOVE EXISTING STEEL POLE, MAST ARM, SIGNALS, SIGNS AND FOUNDATION.

UTILITY LEGEND

— G — G — GAS MAIN
— W — W — WATER MAIN
— S — S — SEWER MAIN
===== STORM DRAIN
— TV — TV — CABLE TELEVISION
— E — E — ELECTRIC CABLES
— T — T — TELEPHONE CABLES
— A — A — AERIAL CABLES



NEMA PHASING

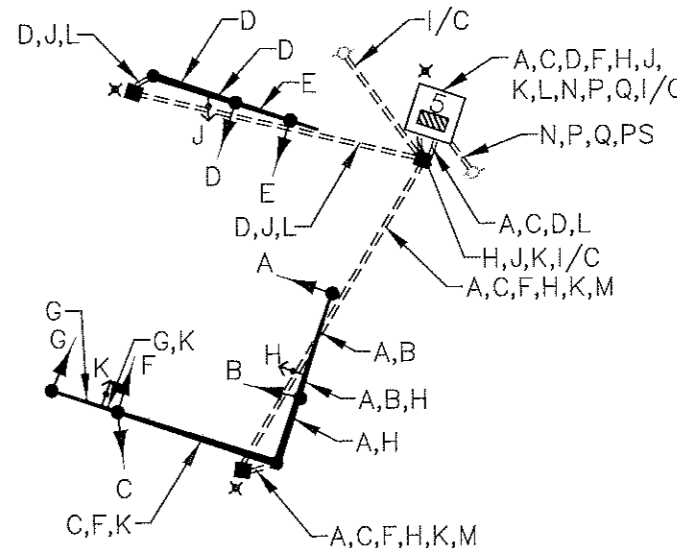


PHASING NOTES:
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY

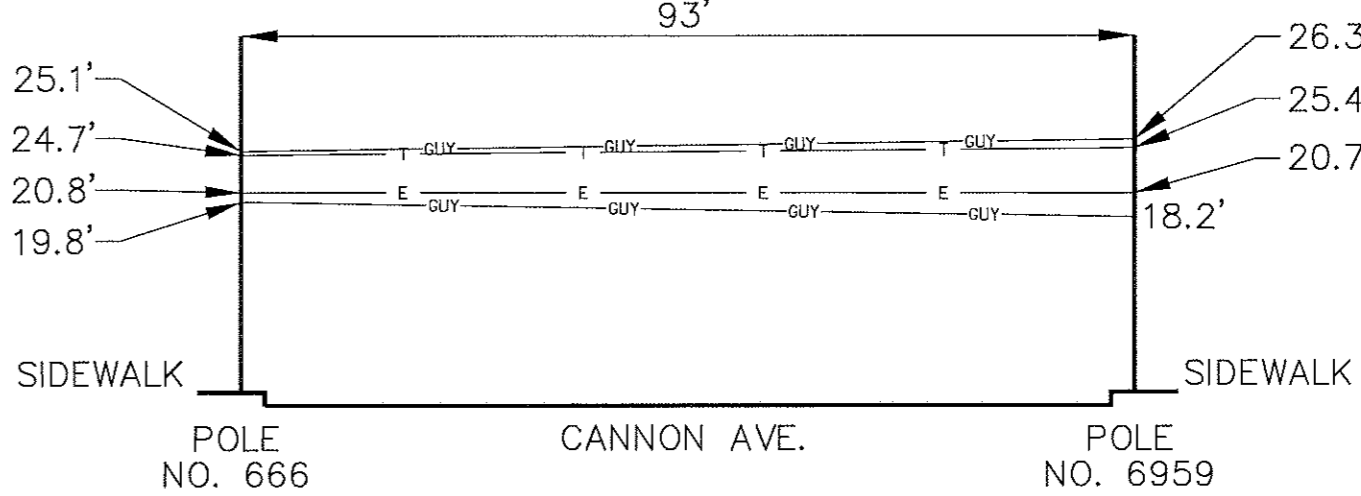
WIRING DIAGRAM

WIRING LEGEND

A - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
B - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
C - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
D - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
E - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
F - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
G - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
H - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
I - 3M OPTICOM DETECTOR CABLE, MODEL 138
J - 3M OPTICOM DETECTOR CABLE, MODEL 138
K - 3M OPTICOM DETECTOR CABLE, MODEL 138
L - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
M - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
N - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
O - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
P - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
Q - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
R - 3/4"x10" GROUND ROD
PS - PROPOSED ELECTRICAL SERVICE
I/C - INTERCONNECT CABLE



① VERTICAL CLEARANCE SKETCH



NOTE: EXISTING RIGHT-OF-WAY BASED ON MDSHA PLAT NO. 4394 AND INFORMATION PROVIDED BY THE CITY OF HAGERSTOWN.

INTERSECTION DESCRIPTION

I. GENERAL

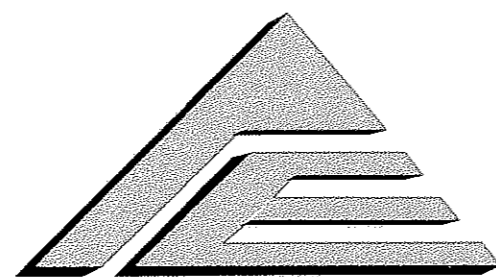
THIS INTERSECTION IS U.S. 40 EAST (EAST WASHINGTON STREET) AND NORTH/SOUTH CANNON AVENUE. CONSTRUCTION AT THIS INTERSECTION INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AND INTERCONNECTION WITH THE OTHER SIGNALIZED INTERSECTIONS IN THE NEW CITY-WIDE SYSTEM. IT IS ASSUMED THAT U.S. 40 EAST (EAST WASHINGTON STREET) RUNS IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA THREE (3) PHASE PRE-TIMED MODE. EASTBOUND U.S. 40 EAST (EAST WASHINGTON STREET) AND NORTH/SOUTH CANNON AVENUE WILL OPERATE IN SEPARATE PHASES. NORTHBOUND AND SOUTHBOUND CANNON AVENUE WILL OPERATE CONCURRENTLY.

PRE-EMPTION ON EASTBOUND U.S. 40 EAST (EAST WASHINGTON STREET) WILL CALL PRE-EMPTION A. PRE-EMPTION ON SOUTHBOUND NORTH CANNON AVENUE WILL CALL PRE-EMPTION B. PRE-EMPTION ON NORTHBOUND SOUTH CANNON AVENUE WILL CALL PRE-EMPTION C.

A NEW EIGHT PHASE FULLY ACTUATED CONTROLLER WITH TELEMETRY MODULE AND PRE-EMPTION HOUSED IN A GROUND MOUNTED CABINET WILL BE INSTALLED.



A/E GROUP, INC.
ENGINEERS • PLANNERS
181 E. Main Street
Westminster, Maryland 21158
A/E Job No. 95-289

REVISIONS

APPROVALS

CHIEF, SIGNAL DESIGN SECTION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MI. 21E04036.43

DRAWN BY: T. COURVILLE

DES. BY: J. LAWRENCE

CHK. BY:

**US 40 East (East Washington St.)
at North/South Cannon Ave.**

COUNTY: WASHINGTON

DATE: 05/30/97

F.A.P. NO. STPG-218-1(7)E

TS NO.

SHEET NO.

SCALE: 1" = 20'

S.H.A. NO. WA9535185

3694

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